# SURREBUTTAL TESTIMONY OF THOMAS LYLE

### ON BEHALF OF

## THE SOUTHERN ENVIRONMENTAL LAW CENTER AND THE SOUTH CAROLINA COASTAL CONSERVATION LEAGUE

### **DOCKET NO. 2009-261-E**

1	Q.	Please state your name.			
2	A.	Thomas Lyle.			
3	Q.	On whose behalf are you testifying?			
4	A.	I am testifying on behalf of the Southern Environmental Law Center (SELC) and			
5		the South Carolina Coastal Conservation League (CCL).			
6	Q.	Have you filed direct testimony regarding SCE&G's application in this docket?			
7	A.	Yes, I provided direct testimony on behalf of CCL and SELC.			
8	Q.	What it the purpose of your surrebuttal testimony?			
9	A.	The purpose of my surrebuttal testimony is to address certain issues raised in the			
10		rebuttal testimony of SCE&G witnesses David Pickles and Felicia Howard.			
11		Specifically, I address the following:			
12		<ul> <li>Mr. Pickles' assertion that efficiency potential studies conducted in South</li> </ul>			
13		Carolina and other states in the region are irrelevant to this proceeding;			
14		• Mr. Pickles' assertion that the documented achievements of successful			
15		program administrators are not relevant in assessing how SCE&G may			
16		perform in the future;			
17		◆ Mr. Pickles' assertion that SCE&G's programs minimize lost			
18		opportunities and do not skim the "cream," i.e. the cheapest efficiency			
19		savings; and			

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 Ms. Howard's comments relative to program marketing and the formation of a Stakeholder Advisory Committee.

#### Issues Relative to the Energy Efficiency Potential Studies

Q. Mr. Pickles states that it is inappropriate to criticize the Company's planned threeyear program impacts based on the results of potential studies found in other states. Would you like to comment?

Yes, I would. Mr. Pickles misconstrues the intent of my arguments. My purpose in pointing to the results of potential studies in other states was to highlight the short-comings of ICF's own potential study and the resultant proposed DSM portfolio. The studies demonstrate that significant energy efficiency resources are prevalent in the region, and that the results of these studies should form the basis of SCE&G's long-term program goals. If one couples the argument that abundant efficiency resources are undoubtedly located within SCE&G's service area with the demonstrated track record of several programs throughout the country, then it is easy to conclude that achieving 0.9% incremental savings in 2012 (relative to the Company's planned 0.7% rate of savings in 2012) is neither "daunting" nor "unachievable."

Although Mr. Pickles' is correct that it is unfair to compare the savings goals of a three-year program to the results of a 15-year (or more) potential study due to the differences in time and the experience gained in the field, it is simply wrong to also assert

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<sup>&</sup>lt;sup>1</sup> Mr. Pickles incorrectly compares the Company's .7% incremental savings rate in 2012 to the 1.5% incremental savings rate that I recommend as the savings goal in 2014 after *five years* of operation. <u>See</u> Pickles Reb. at page 7, lines 3-6). The proper Year 3 comparison is between the Company's proposed ramp-up of .7% and my recommended ramp-up of .9%.

<sup>&</sup>lt;sup>2</sup> Pickles Reb. at 7.

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that these potential studies have no bearing on the reasonableness of the Company's proposal. As explained in greater detail below, potential studies quantify the range of cost effective resources that can be acquired with effective programs. The range of the savings results found in these studies is higher than the range proposed by the Company. Further, potential studies establish goals for program administrators to achieve and budgets for long-term programs. They are hardly irrelevant to long-term planners.

The ACEEE study, for example, shows us that cost-effective potential resources in South Carolina, as a whole, equal between 18 and 24 percent of projected load by 2025. It also shows that investment in energy efficiency promotes jobs, a benefit Mr. Pickles overlooks. From these potential studies, we also know that the maximum achievable potential for cost effective savings in Central Electric Cooperative's service area is about 20 percent by 2017, or roughly 2 percent per year on average. In addition, the studies highlight that the initial ramp-up of incremental savings necessary to achieve longer term cumulative reductions range between 1.2 and 1.6 percent annually, which exceed what SCE&G proposes. Finally, the studies' long-term outlook suggests that SCE&G's three-year program span unnecessarily constrains the effectiveness of its proposed energy efficiency programs. In short, these studies serve as proxies of the magnitude of potential savings that SCE&G could, and should, strive to achieve over the longer term.

With respect to the three-year program span, it takes time to build a delivery infrastructure and customer awareness. While achieving 0.9 percent annual savings is

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certainly doable by 2012, it will take time to reach cumulative savings of approximately 19 percent. To achieve this goal, SCE&G will need to integrate efficiency programs into its long-term integrated resource plans on an equal footing with traditional supply-side resources. Simply put, a three-year program plan is an unnecessary, self-imposed constraint that undermines the longer-term potential success of the Company's effort to build an effective and sustainable efficiency program to serve the needs of its customers.

Q. At Page 3 of his rebuttal testimony, Mr. Pickles states that the purpose for choosing a three-year horizon was to focus on a set of programs that SCE&G could introduce immediately. Please comment.

As an initial attempt to "kick-start" its energy efficiency efforts, the Company's proposed three-year program plan may be acceptable. However, SCE&G should commit to a longer term integrated resource investment strategy and action plan that achieves cumulative energy reductions of 19% by 2025.

### Q. Does Mr. Pickles obfuscate the role of potential studies, in your opinion?

Yes. While I do not doubt Mr. Pickles' expertise, he appears to obscure the role of efficiency potential studies in DSM planning. As noted above, potential studies quantify a range of energy efficiency resources under a variety of standards (*i.e.* technical, economic, maximum achievable or program achievable). In essence, they inform the process of setting program and portfolio goals. If the study places artificial constraints on the available efficiency resource, this limits the potential finding as well as the resulting program goals. ICF appears to have limited its potential study to a narrow range of

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possible outcomes and then suggests that .7 percent is the maximum amount of efficiency that is available in the Company's service area.

It does not appear that ICF has performed a potential study that is comparable to ACEEE's study in South Carolina or ICF's study in Georgia. The record does not reflect the results of a technical, economic or maximum achievable potential for efficiency as defined in my direct testimony at pages 10-11. As a consequence, the Company has not informed the Commission of the magnitude of potential resources that are available relative to the Company's cumulative savings of 366,363 MWH in 2012. Instead of providing a range of potential savings, Mr. Pickles has provided what has been characterized as "an analysis of the potential for DSM programs to provide electric load reductions." This is not a comprehensive analysis. Rather, his derived potential for savings is constrained to a set of programs that "satisfy SCE&G's obligations to effectively manage its business" and by the Company's impressions of what could be "cost-effective, acceptable to regulators and customers, and reasonably achievable." His study is not a technical, economic or a maximum achievable assessment of potential savings in the Company's service area.

- Q. Mr. Pickles asserts that the potential studies in other jurisdictions are not representative of SCE&G's service area and therefore cannot be used for the purposes of assessing the reasonableness of the Company's filed programs. Do you agree?
- A. No. While I have not conducted my own potential study, there is no basis to conclude that the efficiency potential in the Company's territory is any different from that

<sup>4</sup> Pickles Reb. at 3.

<sup>&</sup>lt;sup>3</sup> Pickles Dir. at 4.

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of the State's, Georgia's or most other jurisdictions, like Central Electric Cooperative's territory. I find the Company's insistence that it can't increase its goals perplexing.

### Q. Please explain.

A.

The Company insists that .7 percent would be "acceptable" to customers.<sup>5</sup> This suggests that the Company believes its customers are unable to understand the value of energy efficiency. In fact, customers everywhere understand and value propositions that save them money. At 3-4 cents/kWh, on average, irrespective of location, energy efficiency provides good value to customers.

Retail rates also have little to do with the amount of potential in a given jurisdiction. South Carolina's low rates coupled with the fact that the state does not have a track record providing efficiency services means that there is much more potential in South Carolina than in many parts of the country that have established programs and yet continue to achieve savings of 1.0 percent or more per year.

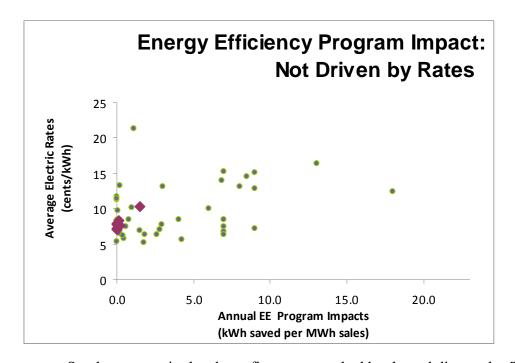
While South Carolina may have had the benefit of lower retail electricity rates in the past compared to many of the leading jurisdictions in efficiency, the impacts of energy efficiency programs have been considerably larger in states where the average retail electric rate is comparable to rates in the southeast, as shown in the figure below:

<sup>&</sup>lt;sup>5</sup> Pickles Reb. at 3.

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Southern states in the above figure are marked by the red diamonds. The figure shows virtually zero efficiency savings per MWH of sales in southern states. The green dots to the right represent other states with comparable average retail rates, like Oregon, Washington, and Nevada that are able to save substantially more kWHs per MWH of sales than Southern states, including South Carolina. This figure demonstrates that even in states where retail rates are comparable to the rates in the South, efficiency program managers are still able to affect change in their communities.

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Mr. Pickles claims that .7 percent is "reasonably achievable" for the Company.<sup>6</sup> In so doing, Mr. Pickles suggests that the Company should not strive to provide a full spectrum of energy services to its customers. Instead, he suggests that the Company should only provide minimal efficiency services on a par with other utilities in the region

<sup>&</sup>lt;sup>6</sup> Pickles Reb. at 3.

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with no demonstrated track record on efficiency. Frankly, Mr. Pickles seems to endorse the Company's apparent goal of achieving the bare minimum of efficiency necessary to escape close scrutiny by the Commission.

The simple fact of the matter is that Mr. Pickles has not demonstrated what the maximum achievable potential for energy savings is in the Company's service territory. Therefore, the Commission has no clear indication of what a reasonable goal should be for the Company.

Issues relative to the Rate of Efficiency Savings

**Q.** 

### Q. Mr. Pickles claims the ACEEE 2009 report on South Carolina reinforces the Company's analysis. Do you agree?

A. No, I do not.

Mr. Pickles states that "the average annual incremental energy savings from "proven utility programs" as cited by ACEEE is approximately 0.5% per year (compared to SCE&G's proposed savings of 0.7% by Year 3)." The remaining ACEEE savings are derived from "unproven programs," some of which pertain to new state and local building codes (which SCE&G cannot implement), a combined heat and power program (which is precluded by anti-fuel switching rules), and weatherization and government building programs funded by ARRA (which SCE&G does not have direct access to) and others. Consequently, Mr. Pickles asserts that the Company's 0.7% goal is admirable in comparison. Again, Mr. Pickles obfuscates the real issue.

<sup>7</sup> Pickles Reb. at 7.

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Goals that have been established for any efficiency program administrator apply only to the electric load that is eligible. If building codes, CHP and ARRA-funded programs achieve higher rates of efficiency, then the Company's target can, and should, be reduced so long as the reduction is on a comparable basis. From a societal perspective, it doesn't matter which entity (whether the utility, the state or a third party) administers cost-effective energy efficiency programs or implements measures that reduce customer bills and create jobs. This principle also applies to the large customers who may opt out of the efficiency program, if such a provision is approved by the Commission (which is not recommended at this time).

Moreover, whether programs are proven or not remains to be seen. In my view, these aspersions are irrelevant to the question of potential. What matters is whether a program administrator has the acumen to marshal its resources to achieve high goals.

Mr. Pickles criticizes your assessment that entire customer segments have been "excluded" from the analysis. Would you like to comment?

Yes, I would. I was not suggesting that customer segments are barred from participating in the Company's prescriptive or custom program. My point was that certain customer segments respond poorly to generic programs. Among these segments are Municipal customers, low-income customers, tenants and small businesses. municipal customers should not be expected to download prescriptive applications to participate. Similarly, small businesses are unlikely to take the time to investigate whether their circumstances satisfy the conditions of enrollment. Low-income customers have neither the funds nor the time to participate; and tenants typically lack the incentive.

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Expecting these customers to take the initiative to reduce their energy consumption is a recipe for failure and low incremental savings rates.

Overcoming these barriers requires dedicated programs, or at minimum, specific marketing initiatives that address customers' needs. The Company needs to take the initiative, not the customer. In fact, program administrators that have been nominated for best practices by the industry have all found ways to proactively address these customer segments by targeting efficiency efforts directly at the segment. Examples of exemplary programs include the California Multi-family Energy efficiency rebate program, the Low income Electric Partnership program (Ohio), and the Local Government Energy Watch partnership program (PG & E).<sup>8</sup>

## Q. At page 5 of Mr. Pickles rebuttal testimony, he compares the results of 80 programs as reported by EIA. Is this comparison meaningful?

Not at all. First, the EIA data, which Mr. Pickles admits, is problematic and therefore not readily useful. EIA data is self-reported, inconsistent and not entirely transparent with respect to critical assumptions, such as baseline energy consumption.

Second, the EIA information is dated. In the intervening years since 2007, program budgets have increased, awareness levels have skyrocketed, and program designs continue to evolve. Implementers continue to perfect their skills for acquiring ever more efficiency resources. Third, despite the shortcomings of this comparison, Mr. Pickles identified five program administrators (not to mention the several other programs that

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<sup>&</sup>lt;sup>8</sup> Compendium of Champions, ACEEE, February, 2008, Report No. U081

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1 ACEEE identifies on a regular basis through its own non-EIA data) that were able to 2 achieve savings of 1.5% annually. This proves that it can be accomplished.

## Q. At page 11, Mr. Pickles criticizes your references to the states of Iowa and Illinois. Do you agree?

No. My reference to Iowa and Illinois served only to illustrate the fact that efficient products are as available in South Carolina as they are in Iowa and Illinois.

Thus, Mr. Pickles' reference to the 2007 EIA results for Iowa and Illinois, which he admits are of questionable value, are not relevant. Further, I did not directly compare the DSM potential in South Carolina with that of Iowa and Illinois as claimed by Mr. Pickles.

There are important circumstances relevant to the states of Iowa and Illinois worth mentioning, however. In the state of Iowa, there is a confusing patchwork of overlapping utility services territories. Hundreds of municipal electrics and rural cooperatives provide, alternately, gas and electric services across investor-owned franchises, cooperative areas and municipal areas. Many of the municipals and rural cooperatives are not engaged in providing efficiency services or have just barely begun to investigate whether they should provide such services. Investor-owned utilities are the only active participants in efficiency. In spite of the confusing marketplace and limited offerings, Iowa is typically noted by ACEEE as an active partner in efficiency. Also, in Illinois, Com Edison, a major investor-owned utility, began offering a non-residential prescriptive program in June 2008. The program proved so popular that by November, 2008, Com Edison closed the program due to budget constraints, proving that pent-up demand for

<sup>&</sup>lt;sup>9</sup> ACEEE 2009 State Energy Efficiency Scorecard, October, 2009, Report E097.

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1		efficiency exists everywhere, especially where utilities have no track record in offering				
2		efficiency services to customers.				
3 4 5 6	Q.	At pages 14-15, Mr. Pickles provides examples of actual programs in an attempt to illustrate the time required for ramping up programs. Are these valid examples?				
	A.	No, they are not.				
7		It is true that savings results are affected by myriad factors. And, due to these				
8		factors, actual results may vary from year to year. Irrespective of these factors, however,				
9		there is no reason why the Company is justified from shying away from aggressive goals.				
10		Actual results and goals are two different points of reference.				
11		I also note that in the case of Connecticut, savings vacillated from year-to-year				
12		because the state government raided the public benefits funds to pay for other non-				
13		efficiency government programs. And, the end results for both Connecticut and Arizona				
14		support my contention that .9% to 1.0% is achievable.				
15 16 17	Q.	Mr. Pickles takes issue with your suggestion that the Company's programs employ "cream skimming" tactics. Could you comment?				
18	A.	Certainly. The Company's own cost data show that the proposed programs will				
19		acquire exceptionally cheap energy savings at the expense of achieving deeper savings;				
20		resources that the company will need to revisit later at considerable expense.				

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	Program Costs/kWh		
Program	Year 1	Year 2	Year 3
Res. Benchmarking	0.07	0.05	0.05
Res. Information Displays	0.43	0.43	0.42
Res. Audits	0.91	0.90	0.91
Res. Lighting and Appliances	0.14	0.14	0.14
Res.New HVAC and Water Heat	0.41	0.41	0.42
Res. Existing HVAC Efficiency	0.36	0.33	0.33
Res. ENERGY STAR Homes	1.29	0.75	0.69
C&I Prescriptive	0.08	0.07	0.07
C&I Custom	0.12	0.11	0.11
Total	0.16	0.16	0.18

Average life time costs (~10 years) 0.016

As the table above demonstrates, the first-year cost of saved energy, according to the Company, ranges between \$0.07/kWh and \$1.29/kWh. Compared to other established programs, the first year cost of saved energy can be as high as \$0.40/kWh and still be cost effective. Thus, if SCE&G is only spending, on average \$.16/kWh, there is a deep reservoir of additional cost-effective efficiency resources. In the long run, especially when lighting codes are implemented, SCE&G will likely have to revisit many customers to attain ever higher efficiency from non-lighting sources, which will increase its costs overall.

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#### Issues related to Market Segmentation

Q. Ms. Howard contends that you misunderstand the Company's presentation with regard to marketing programs. Do you agree?

A.

No. I believe I do understand the Company's presentation, generally. And, I do partially agree that the Company should be granted some flexibility to develop marketing plans to address certain segments of the market. However, I also believe that Ms. Howard missed the point of my direct testimony. The point of my testimony was not that the Company doesn't have a marketing strategy (although it currently doesn't, by Ms. Howard's own admission). My point was that the Company appears not to have developed a process for identifying (and eliminating) market barriers that prevent participation. SCE&G should, and will need, to start the process now if it wants to reach its goal in 2012. If the Company does not begin the process of figuring out how to address market barriers soon, a year's worth of effort and resources could be wasted before the Company even understands why customers aren't participating.

#### Issues related to Stakeholder Advisory Committees

Q. Ms. Howard rejects the opportunity to establish a constructive Stakeholder Advisory Committee. Is this prudent?

A.

No. Ms. Howard is correct that the Company is responsible for prudently managing its business, and it should be held accountable. Nevertheless, it would be unwise to reject the formation of a stakeholder advisory committee ("SAC"). As discussed in my direct testimony, a SAC can provide valuable insight into how the Company's programs are being perceived by customers. A SAC can also identify market

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- barriers and other challenges that the Company could not. Further, gaining buy-in and
   building consensus amongst SAC members could also help to reduce litigation and make
   more efficient future program approvals and evaluations.
- 4 Q. Does this conclude your surrebuttal?
- 5 A. Yes, it does.

#### CERTIFICATE OF SERVICE

I hereby certify that the following persons have been served with a copy of the Surrebuttal Testimony of William Steinhurst and a copy of the Surrebuttal Testimony of Thomas Lyle via electronic mail, and that a representative of each party has consented to such method of service.

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This 21st day of January, 2010.

s/Jill Tauber